

### **REMARKS**

Claims 1-31 are pending while claims 4 and 25-30 are rejected. The Applicants wish to cordially thank the Examiner for indication of the allowable subject matter with respect to claims 1-3, 5-24, and 31. Claims 4 and 25 have been amended leaving claims 1-31 for consideration upon entry of this amendment. No new matter has been added.

#### **Specification Objections**

The objections concerning the informalities noted in the Detailed Action with respect to paragraph [0029] of the disclosure has been corrected in conformance with the suggestions of the Examiner. It is respectfully requested that the objection to the disclosure be withdrawn. No new matter has been added.

#### **Claim Rejections - 35 USC §112**

Claims 4 and 25-30 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse.

With respect to claim 4, the Examiner alleges that claim 4 recites a power supply configured to provide an anode-to-cathode gap voltage, the anode is referenced to ground potential and the cathode is connected to a negative terminal of a second power supply. The Examiner alleges that it is unclear how the power supply provides the anode-to-cathode voltage if the second power supply provides a negative potential to the cathode. Furthermore, the Examiner correctly points out that there is insufficient antecedent basis for the limitation "said second power supply" in this claim.

Claim 4 has been amended to depend from claim 3, which introduces "a second power supply." Thus, there is antecedent basis for "said second power supply" recited in claim 4. In addition, it is respectfully submitted that claim 4 is clear with respect to reciting "wherein said anode is referenced to ground potential and said cathode is connected to a negative terminal of said second power supply," as Figure 2 illustrates a ground between first and second power supplies and illustrates the second power supply (232) a negative potential, i.e., (-).

With respect to claims 25-30, the Examiner states that claims 25-30 recite "said x-ray-

tube configured to generate an anode-to-cathode gap voltage greater than 150 kV.” The Examiner alleges that however, as understood by persons skilled in the art, that the gap voltage is generated by a power supply, not by the x-ray tube.

Claim 25, from which claims 26-30 depend, has been amended to recite “said x-ray tube having an anode-to-cathode gap voltage greater than 150kV.”

Thus, it is respectfully requested that the rejections to claims 4, and 25-30 be withdrawn.

**Claim Rejections -35 USC § 102**

Claims 25, 26, 29, and 30 stand rejected under 35 U.S.C. §102(e) as being anticipated by Halavee (U. S. Patent No. 6,324,257 B1). Applicants respectfully traverse.

With respect to claim 25, the Examiner alleges that Halavee disclosed a power supply cable for an x-ray tube (7) comprising: a waveguide (4) configured to transfer optical energy to the x-ray tube; an electrical conductor (3a, 3b) configured to transfer electrical energy to the x-ray tube, the electrical conductor surrounding at least a portion of the waveguide along a length of the cable; and an insulation material (10) disposed between the waveguide and the electrical conductor, the insulation material surrounding the waveguide and the electrical conductor.

It is respectfully noted that Halavee discloses **miniaturized x-ray tubes** that enable radiation treatment by locating the x-ray source **within a human body** in close vicinity to or inside of the area to be treated with X-rays. (See Abstract). Furthermore, Halavee discloses using **much lower voltage than known devices**, pulsed heat and high flux so as to reduce the heat which is produced and thus shortening treatment time of the subject. Col. 5, lines 35-37. More specifically, Halavee discloses that the anode 8 is charged to a high voltage (**10- 50 kV**) by means of one of the conductors 3 a, 3 b from the voltage power supply 1 or voltage pulse generator, and the **photocathode 9 is kept, together with the capsule 7, at ground potential**. Col. 6, lines 62-66. The Examiner admits in the previous Detailed Action that Halavee teaches the anode is connected to a high voltage and the cathode is connected to the ground (column 7, lines 24-30). Moreover, Halavee discloses that the insulated X-ray source is preferably replaceable and disposable unit for avoiding complex sterilization processes. Col. 6, lines 26-28. This is quite unlike the diagnostic imaging apparatus claimed.

Halavee does not teach or suggest, and in fact teaches away from, said x-ray tube configured for diagnostic imaging, said x-ray tube having an anode-to-cathode gap voltage

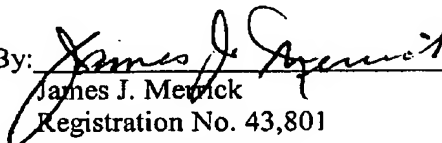
greater than 150kV, as in claim 25. Thus, claim 25, including claims depending therefrom, i.e., claims 26-30, define over Halavee.

**Conclusion**

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fees be charged to Deposit Account No. 07-0845 maintained by Applicants' Assignee.

Respectfully submitted,

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